

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Application Number : 10/572,994 Confirmation No.: 9073  
Applicant : Nelson *et. al.*  
Filed : November 8, 2006  
Title : Polybasic Acid Esters and Their Use in Fibre Optic Cables  
TC/Art Unit : 1797  
Examiner: : Vishal V. Vasisth  
  
Docket No. : ARZ-024630-WO  
Customer No. : 67844

**DECLARATION OF LLOYD NELSON PURSUANT TO 37 C.F.R. §1.132**

I, the undersigned, state the following in support of the above-referenced U.S. patent application:

1. I am a named inventor for the above-referenced U.S. patent application.
2. I am personally knowledgeable of the subject matter of the above-referenced U.S. patent application, and in particular with ester compositions as disclosed and claimed in the above-referenced U.S. patent application.
3. I have reviewed the Office Action dated March 18, 2010 for the above-referenced U.S. Patent Application, and have further reviewed U.S. Patent Nos. 4036771 (Denis) and 6010984 (Heimann) cited in the March 18, 2010 Office Action.
4. Denis teaches the use of complex ester compositions in combination with mineral or synthetic hydrocarbon oils for use as multigrade oils to reduce the amounts of viscosity number improving additives in such oils.
5. Denis expressly discloses at column 3, lines 21-51 complex ester compositions resulting from the reaction of dimeric and trimeric acids which are the product of the dimerization and trimerization of the following unsaturated fatty acids:
  - tetradecenoic acids (such as myristeic acid);
  - hexadecenoic acids (such as palmitoleic acid);
  - octadecenoic acids (such as oleic acid);
  - octadecadienoic acids (such as linoleic acid);
  - octadecatrenoic acids (such as linolenic acid);

- eicosenoic acids;
- docosenoic acids (such as erucic acid or brassidic acid);
- natural or synthetic mixtures of a plurality of such acids, for example:
  - fatty soya bean acids which contain inter alia about 25% of octadecenoic acid, 45% of octadecadienoic acid and 7% of octadecatrienoic acid;
  - fatty linseed oil acids which contain inter alia about 20% of octadecenoic acid, 15% of octadecadienoic acid and 50% of octadecatrienoic acid;
  - fatty spermaceti oil acids which contain inter alia about 5% of tetradecenoic acid, 15% of hexadecenoic acid, 35% of octadecenoic acid and 1% of octadecadienoic acid;
  - fatty colza oil acids which contain inter alia about 18% of octadecenoic acid, 19% of octadecadienoic acid, 8% of octadecatrienoic acid, 6% of eicosenoic acid and 42% of docosenoic acid; and
- di- and tricarboxylic acids resulting from the dimerization or trimerization of hydroxycarboxylic acids such as ricinoleic acid.

6. The above unsaturated fatty acids expressly disclosed in Denis for preparing the dimer and trimer acids which result in the disclosed complex ester compositions are not tall oil fatty acids.

7. The ester compositions as claimed in claims 1-30 of the above-referenced U.S. patent application are intended for use in a sealant composition, and in particular for use in connection with fumed silica as a cable-protectant composition.

8. Compatibility of the ester compositions of claims 1-30 with polypropylene is key parameter important factor to be considered when selecting an ester composition for use in the invention of claims 1-30.

9. The ester compositions of claims 1-30 are derived from tall oil fatty acids which provides desirable polypropylene compatibility characteristics.

10. Ester compositions derived from non-tall oil fatty acids, as described in Denis, do not provide acceptable polypropylene compatibility for use as a cable-protectant.

11. It is my opinion that one of ordinary skill in the art would not have selected ester compositions derived from tall oil fatty acids for use in the invention of claims 1-30 based on the

teachings of Denis because the complex ester compositions of Denis do not display the polypropylene compatibility characteristics of the inventions claimed in claims 1-30.

I declare (or certify, verify, or state) under penalty of perjury that the foregoing is true and correct.

By: LA Nelson

Print Name: Lloyd A. Nelson

Title: Technology Manager

Date: October 19, 2010

Place: Lawrenceville, GA.